Li Sa Kon Permit Engineer Maricopa County Air Quality Department 1001 N. Central Suite 125 Phoenix, AZ 85004

Subject: Air Quality Permit to Operate and/or Construct, Permit Number 140062, Minor Permit Modification, Revision 0.0.1.0: Hickman's Egg Ranch Inc., 41625 W. Indian School Road, Tonopah, AZ 85354

Ms. Kon,

Please accept my comments in Attachment A for the minor permit modification for Air Quality Permit to Operate and/or Construct, Permit Number 140062. I believe that my comments are regulatory reasons for denying the permit in its current version.

Sincerely,

Daniel E. Blackson 42211 W. Salome Highway Tonopah, AZ 85354

cc: EPA Region 9

Attachment A

Comments

Air Quality Permit to Operate and/or Construct

Permit No.: 140062

Permit Modification Number: 140062-410195

Revision No.: 0.0.1.0 (pending)

Introduction

Public Hearing Feedback

I would first like to provide some feedback about requesting public hearings.

MCAQD provided feedback to me by citing MCAQD Rule 220 §407.2, which reads:

- - CA CD5 4 C21 C11 C4 CD1 C6C4 C11C4: 641 CD: (1) C6C1 C11C4 C
 - CA CC4 C 60060114103 (201 1041 2) 4 C C 4 C 6012 A
 - □A □□G□G45 426 6C□G □2□□4□□12 5 □□□□□5 □G□□G642:15 5 426□12 □□□□□1□1□4 □4□5 □G□6□2 21 □G4□GC□2 6C4 I 4□1□24 □□□□□5 □G628 □□□C:15 5 426□A
 - □A □C4 I 4 □ □214 □ □□□□□5 □661218 □□□6642 : 15 5 42 6□A
 - BA (15 4) (11 4 (11) (21 (124 2 (5 (4 (11 (11 (11) 2 (11) 5 6C4 (14 (11) 6 426 (11) 5 (11) 5 (11) 6

It is clear that this section of the Rule does not have any reference to Public Hearing requests, inform the public how to make a request, and does not set any time restrictions to Public Hearing requests.

The proper rule citation that MCAQD should reference is Rule 220 §407.4, which reads:

This section of the rule does not have any time restrictions or limitations connected to permit applications or website postings when requesting a public hearing. I am hopeful that MCAQD will become more citizen-friendly by:

- Creating a Public Hearing Request form
- Provide a link to the Public Hearing Request form on MCAQD's website and the Weekly Permit Report

Comment #1: Bulk Materials

I previously made a comment on Revision 0.0.0.0 of the Permit that bulk materials existed at the facility. I stated:

"Maricopa County Air Quality Department (AQDX) received an application for a Non-Title Air Quality Permit from Hickman's Egg Ranch, Inc. on September 26, 2014 for the Tonopah facility. In Section L. OTHER DUST GENERATING

OPERATIONS, question #6 was checked "Yes" for bulk materials handled, stored or transported at this facility and identified the bulk material as "Chicken Feed".

The bulk material must be off-loaded from delivery trucks and conveyed from the silos to the hen houses. The transfer of bulk material is a dust generating activity and must be properly regulated. ..."

I believe that MCAQD was hasty in its response and did not consider the full requirements of A.R.S. § 49-457 and the facility's location. Here is MCAQD's response:

"Response: A.R.S. § preempts Maricopa County regulation of PM -10 particulate matter emissions produced by regulated agricultural activities.

Regulated agricultural activities are defined as (A.R.S. §49-457.P.5(a)):

Commercial farming practices that may produce PM-10 particulate emissions within the regulated area, including activities of a dairy, a beef cattle feedlot, a poultry facility and a swine facility.

Thus, regulated agricultural activities are not subject to MCAQD rules or stationary air permitting requirements.

However, agricultural activities are regulated by the Arizona Department of Environmental Quality (ADEQ) through an Agricultural General Permit. The general permit requires that farms adopt agricultural best management practices (BMPs) for the management and control of particulate emissions."

MCAQD is incorrect in its application of A.R.S. 49-457. While the definition for "regulated agricultural activities" is correct, "regulated agricultural activities" must also be within a "regulated area." A.R.S. 49-457.O.6 defines "regulated area" as:

- 6. "Regulated area" means any of the following:
- (a) The Maricopa PM-10 particulate nonattainment area.
- (b) Any portion of area A that is located in a county with a population of two million or more persons.
- (c) Any other PM-10 particulate nonattainment area established in this state on or after June 1, 2009.

According to MCAQD website, the facility (41625 W. Indian School Road) is not in the Maricopa PM-10 particulate nonattainment area, Area A, or any other PM-10 particulate nonattainment area. Therefore, the facility is prohibited from acquiring a Agriculture General Permit and must meet the requirements for bulk materials: Rules 220, 300, and 311 (see §102); State Implementation Plan Regulation 2 – Permits 023 Permit Classes & 220 Permits to Operate; and State Implementation Plan Regulation 3 – Control of Air Contaminants 300 Visible Emissions & 311 Particulate Matter from Process Industries.

Please properly address my original comment that the facility has bulk materials handled, stored, and/or transported and that permit conditions be established according to regulatory requirements.

Comment #2: Sampling for only hydrogen sulfide for chicken manure is inadequate

I previously made a comment on Revision 0.0.0.0 of the Permit that sampling for only hydrogen sulfide for chicken manure is inadequate.

The response from MCAQD was:

Response: Maricopa County Air Pollution Control Rule 320 describes the MCAQD authority to limit emissions of odors and other gaseous contaminants to the atmosphere. While there may be multiple odorous compounds in addition to hydrogen sulfide produced by a given poultry facility, only hydrogen sulfide is subject to emission limits.

Rule 320 §304 limits emissions of hydrogen sulfide (H_2S) to concentrations of no more than 0.03 parts per million by volume for any averaging period of 30 minutes or more at any occupied place beyond the premises on which the source is located. To demonstrate compliance with this standard the facility is required to perform H_2S monitoring. To date no exceedance of the standard has been observed. In our current rules, there are not quantitative standards for any of the compounds noted in the comments provided other than H_2S .

With regards to the material containment requirements of Rule 320 §302 and Permit Condition 1.a, the department has concluded that no materials are being allowed to unreasonably evaporate, leak, escape or be otherwise discharged into the ambient air. The operations at Hickman's are those that would typically occur at any facility of this type and MCAQD believes the source is taking reasonable measures to contain odors.

It is worth noting that MCAQD considers the chicken manure at the Hickman operation as a source.

My comments are:

- a. How did MCAQD conclude that not materials are being allowed to unreasonably evaporate, leak, escape or be otherwise discharged into the ambient air? How does MCAQD continue to make this conclusion?
- b. MCAQD may believe that operations at Hickman's are those that would typically occur at any facility of this type, but that doesn't make it a legal operation. By establishing Permit Condition 1.a, MCAQD created an emission

- limit for odor, which is enforceable. What is MCQAD doing to monitor Permit Condition 1.a? Why isn't MCQAD enforcing Permit Condition 1.a?
- c. It is inaccurate for MCAQD to state: "only hydrogen sulfide is subject to emission limits". Chicken manure emissions also include ammonia, particulate matter, and volatile organic compounds, all of which are regulated. What is MCAQD doing to limit these emissions to protect public health and welfare?

Comment #3: Compliance Demonstration Hydrogen Sulfide Monitoring is Inadequate

My original comment on Revision 0.0.0.0 of Permit # 140062 was:

"Complaint driven monitoring for hydrogen sulfide lacks clarity and is inadequate to demonstrate compliance.

Discussion

According to the Compliance Demonstration 2.b of the permit: The Permittee shall perform a compliance demonstration by conducting a test to monitor hydrogen sulfide levels within 90 days of any of the following events: "... b. The receipt of three (3) odor complaints within any 12 -month period...". This could be interpreted to perform hydrogen sulfide monitoring each time a group of three odor complaints are received within a 12-month period or perform monitoring once in a 12-month period if three or more odor complaints are received. In other words, if fifteen odor complaints are received within a 12-month period, is hydrogen monitoring performed 5 times or once? Also, monitoring months after a complaint does not demonstrate compliance with the odor standard at the time the complaint was made. One hydrogen sulfide monitoring event for 50+ complaints in a <12 month period does not demonstrate compliance with odor control requirements.

In order to protect the environment, protect public health, and allow residents to enjoy their life and property, monitoring within 24 hours should be required every time that there is an odor complaint. The Permittee should not be given extremely generous timeframes to choose favorable process and atmospheric conditions to demonstrate compliance with odor control failures. The Texas Commission on Environmental Quality Odor Complaint Investigation Procedures is a model for response to odors that could be adopted to more thoroughly address odor complaints."

Rule/Regulation

The AQDX rule regulating this activity are Rule 320 and State Implementation Plan Regulation 3 – Control of Air Contaminants 032 Odors and Gaseous Emissions and 032 Odors and Gaseous Emissions (Paragraph G, H, J, K)."

MCAQD response was:

"Response: Due to the number of odor complaints received regarding the Tonopah facility, MCAQD directed Hickman's to conduct Hydrogen Sulfide (H $\,_2$ S) monitoring

in accordance with their Air Quality Permit. On February 11, 2015 MCAQD staff observed the facility's monitoring technique and verified that Hickman's monitoring shows hydrogen sulfide concentrations below permit limits. The facility is currently performing H ₂S monitoring on a monthly basis. On the evening of July 9, 2015 MCAQD staff conducted its own monitoring downwind of the facility. MCAQD monitoring did not detect measurable concentrations of H₂S.

On August 13, 2015 MCAQD also conducted "side by side" H2S monitoring at the same time and location as Hickman facility staff to compare results. Hydrogen sulfide concentrations measured by MCAQD equipment were non $\,$ -detect while Hickman's equipment yielded less than 0.008 parts per million (ppm) which is below the permit limit of 0.03 ppm.

The monitoring conducted to date indicates that H_2S is not currently a source of odors at the facility and that permit conditions are being met. Additional monitoring will be performed to ensure continued compliance with permit conditions."

It is interesting that MCAQD had to direct "Hickman's to conduct Hydrogen Sulfide (H_2S) monitoring in accordance with their Air Quality Permit" when they should have implemented their permit requirements independently. Also, MCAQD implies that permit conditions are being met when there have been a number of odor complaints that drove MCAQD to demand hydrogen sulfide monitoring. The odor complaints demonstrate that Permit Condition 1.a is not being met.

MCAQD did not address my original comment. MCAQD's response discussed field monitoring actions, not the permit conditions vague language for compliance demonstration. I am resubmitting my original comment in hopes that the permit will be modified to require more appropriate and timely monitoring after odor complaints.

Comment #4: Hydrogen Sulfide Monitoring Location

Hydrogen sulfide monitoring should be monitored at the point of release like other sources, not at the property boundary. When it is monitored at the property boundary the original release concentration has been diluted and dispersed and is not a true measurement of the source's compliance.

Comment #5: Compliance Plan

My original comment on Revision 0.0.0.0 of Permit # 140062 was:

"The Compliance Plan singles out a particular gas, hydrogen sulfide, rather than enforcing the odor control standard.

Discussion

The Odor Control Standard reads:

"1. Standards:

No person shall emit gaseous or odorous air contaminants from equipment, operations or premises under his control in such quantities or concentrations as to cause air pollution.

a. Material Containment Required: Materials including, but not limited to, manure shall be processed, stored, used and transported in such a manner and by such means that they will not unreasonably evaporate, leak, or escape or be otherwise discharged into the ambient air in such quantities or concentrations as to cause air pollutions smells, aromas or stenches commonly recognized as offensive, obnoxious or objectionable to a substantial part of a community. Where means are available to reduce effectively the contribution to air pollution from evaporation, leakage or discharge, the installation and use of such control methods, devices or equipment shall be mandatory."

Hydrogen sulfide is not specifically listed in the Odor Control Standard, but "air pollutions smells, aromas or stenches commonly recognized as offensive obnoxious or objectionable to a substantial part of a community" is listed. Only identifying hydrogen sulfide is too limiting. Hydrogen sulfide is an indicator of odor, but control of all odors is the permit condition. The offensive gases and particulates in chicken manure have been identified and can be measured. The Compliance Plan should be revised to address an exceedance of offensive, obnoxious or objectionable air pollution smells, aromas or stenches.

Rule/Regulation

The AQDX rule regulating this activity is Rule 320 and State Implementation Plan Regulation 3 – Control of Air Contaminants 032 Odors and Gaseous Emissions and 032 Odors and Gaseous Emissions."

MCAQD response was:

Response: MCAQD has not observed that materials are being allowed to unreasonably evaporate, leak, escape or be otherwise discharged into the ambient air. The operations at Hickman's are those that would typically occur at any facility of this type and MCAQD believes the source is taking reasonable measures to contain odors. See also responses to Comments #2 and #3.

MCAQD did not respond to the comment, but stated their observation, what they believe is typical operations, and their belief that reasonable measures are being taken. There was no discussion of a Compliance Plan for the exceeding the odor standard.

Please address the following:

- a. My original comment.
- b. What has MCAQD done to observe that materials are not being allowed to unreasonably evaporation, leak, escape, or be otherwise discharged into the ambient air? Please provide dates, location, measurement instrumentation/techniques, and documented data.

- c. The concern is not about typical operations at Hickman's or anywhere else. It is about compliance and when Permit Condition 1.a is repeatedly violation, what is MCAQD going to do? Last year there were over 50 complaints and in 2015 there were over 200 complaints. All phases of the facility are not built, so it would be reasonable to believe that complaints will continue to increase.
- d. The odor complaints are on the increase, what reasonable measures were taken to contain odors? How was their effectiveness measured?
- e. If MCAQD believes the facility has taken reasonable measures to contain odors, why are odor complaints increasing?
- f. Why is the facility not required to achieve compliance with Permit Condition 1.a?
- g. What non-compliance actions of Permit Condition 1.a are needed to initiate a Compliance Plan to require the facility to come into compliance?

Comment #6: Manure Hauling

My original comment on Revision 0.0.0.0 of Permit # 140062 was:

"Hauling of chicken manure as bulk material is not identified in Category D. Bulk Material Handling of the application for Dust Control Permit E140170 or subsequent Dust Control Plan Changes.

Discussion

Rule 310.01 Fugitive Dust From Non-Traditional Sources of Fugitive Dust has the following requirement:

"302.8 Livestock Activities...

- a. Control Measures...
- (2) For bulk material hauling, including animal waste, offsite and crossing and/or accessing an area accessible to the public:
 - (a) Load all vehicles used to haul bulk material, including animal waste, such that the freeboard is not less than three inches;
 - (b) Prevent spillage or loss of bulk material, including animal waste, from holes or other openings in the cargo compartment's floor, sides, and/or tailgate(s);
 - (c) Cover cargo compartment with a tarp or other suitable closure; and
 - (d) Install, maintain, and use a suitable trackout control device that controls and prevents trackout and/or removes particulate matter from tires and the exterior surfaces of motor vehicles that traverse the site."

The facility's *Nutrient Management Plan* by Huston Environmental Services (October 31, 2014), states that the 4,300,800 laying hens at the facility will produce 136 tons of manure per day or 49,555 tons annually. Off-site hauling of the manure will result in significant truck traffic and the bulk hauling of manure should be a permit condition to protect the environment and public health.

Rule/Regulation

The AQDX rule regulating this activity is Rule 310.01 and State Implementation Plan Regulation 3 – Control of Air Contaminants 310.01 Fugitive Dust From Non - Traditional Sources of Fugitive Dust."

MCAQD response was:

Response: A.R.S. § 49-457.0 preempts Maricopa County regulation of PM-10 particulate matter emissions produced by regulated agricultural activities.

As a result, Rule 310.01 does not apply to this facility. See also Comment #1.

MCAQD is not accurate. The facility is not in a "regulated area" so it does not perform "regulated agricultural activities" and is not eligible for an Agricultural General Permit. See A.R.S. 49-457.P.5(a) and A.R.S. 49-457.P.6.

I am resubmitting my original comment for a proper reply and request that the permit include requirements for hauling manure.

Comment #7: Particulate Matter from Process Industry

My original comment on Revision 0.0.0.0 of Permit # 140062 was:

"Egg and manure production is a process industry that generates particulate matter.

Discussion

Rules 100 and 311 do not define "Process Industry". However, Arizona Administrative Code R18-2-101.111 reads ""Process" means one or more operations, including equipment and technology, used in the production of goods or services or the control of by-product waste." "Goods" and "services" are not further defined. A definition of "industry" could not be found in County, State, and Federal regulations, however, references were made to the Standard Industrial Classification Manual, 1987. Chicken egg farms were classified as "Businesses and Products of SIC Industry 0252". Also, the North American Industry Classification System code for chicken egg production is 112410.

The Tonopah Egg Factory should be regulated as a process industry (Rule 311) for the following reasons:

 The facility meets the definition of a stationary source (see Rule 100 §200.105)

- The facility discharges particulate matter (i.e., PM₁₀, PM_{2.5}, feathers, dried skin, feces, feed, bacteria, fungi, and endotoxins; Air Quality and Emissions from Livestock and Poultry Production/Waste Management Systems, Kenneth D. Casey, et. al)
- The facility is an "Affected Operation" (Rule 311 § 200.201), which is not subject to Rules 313, 316, 317, 319, 322, or 323.
- The facility has processes: 1) unloading and transfer of feed, 2) production of eggs, 3) collection, drying, and loading of manure, 4) ventilation of hen house, manure pit, and manure drying area, and 5) process water system with impoundments.
- The facility is defined as an industry per Standard Industrial Classification Manual, 1987 code 0252 and North American Industry Classification System code 112410.
- Arizona Revised Statures 3-1204 acknowledges that there are sheep and goat industries, which infers that chickens are also an industry.
- EPA recognizes that egg production and chicken manure is an industry where it states in the effluent guidelines and standards for concentrated animal feeding operations (CAFO) point source category 40CFR §412.3: "This part applies to manure, litter, and/or process wastewater discharges resulting from concentrated animal feeding operations (CAFOs). Manufacturing and/or agricultural activities which may be subject to this part are generally reported under one or more of the following Standard Industrial Classification (SIC) codes: SIC 0211, SIC 0213, SIC 0214, SIC 0241, SIC 0251, SIC 0252, SIC 0253, SIC 0254, SIC 0259, or SIC 0272 (1987 SIC Manual)."

The Tonopah Egg Factory is a process industry and Rule 311 requirements should be included in it's Non-Title V Air Quality Permit to establish particulate matter emission limits and require appropriate recordkeeping, reporting, monitoring, and testing.

Rule/Regulation

The AQDX rule regulating this activity are Rules 300 & 311 and State Implementation Plan Regulation 3 – Control of Air Contaminants 300 Visible Emissions & 311 Particulate Matter from Process Industries."

MCAQD response was:

"Response: Particulate matter generated by a poultry facility is regulated by ADEQ through the implementation of agricultural best management practices as established by A.R.S. §49-457. Agricultural BMPs are established to reduce PM10 particulate emissions from the activities of a dairy, a beef cattle feedlot, a poultry facility or a swine facility, including practices relating to the following: unpaved access connections, unpaved roads or feed lanes, animal waste handling, transporting, arenas, corrals, and pens. See also response to Comment #1."

MCAQD may be assuming that "agriculture best management practices" apply to all the land within Maricopa County. It does not. In order for a commercial farm to be eligible for an "agricultural general permit" (BMPs), in must be in a "regulated area". See A.R.S. 49-457.P.6. The Hickman's Egg Ranch, Inc. at 41625 W. Indian School

Road is not located in a "regulated area" for "agriculture best management practices".

I am resubmitting my original comment for a proper reply and request that the Egg and manure production be regulated as a process industry.

Comment #8: The Hickman's Egg Ranch, Inc. at 41625 W. Indian School Road is a stationary source and should go through the new source review process.

I made a lengthy comment on Revision 0.0.0.0 of Permit # 140062 that this source should go through a New Source Review process. I will summarize my major points:

- The facility meets the definition of a Stationary Source.
- The facility is source of air pollution.
- The facility emits regulated pollutants:
 Criteria pollutants: particulate matter (PM₁₀ & PM_{2.5}) and
 - Criteria pollutants: particulate matter (PM₁₀ & PM_{2.5}) and nitrogen dioxide;
 - □ VOCs which are a precursor of ozone, which is regulated;
 - □ VOCs which are a Hazardous Air Pollutant;
 - \square Ammonia which is a precursor of PM_{2.5}, which is regulated;
 - ☐ Hydrogen sulfide, which is listed as a New Source Review Standard; and
 - □ Odor, which is regulated by Maricopa County Air Quality Rules and SIP Regulation 3 Control of Air Contaminants 032 Odors and Gaseous Emissions and 032 Odors and Gaseous Emissions (Paragraph G, H, J, K).
- According to the facility's Aquifer Protection Permit Determination of Applicability application, 49,555 tons of manure is generated per year. Note that the hen house ventilation system blows through the hen cages, across the manure collection pit, across the rows of manure, and out the building opening. There are no pollution control devices. Air pollution discharged consists of regulated gases, odors, feathers, chicken dander, PM₁₀, PM_{2.5}, dried skin, feces, feed, bacteria, fungi, and endotoxins.
- According to the facility's Aquifer Protection Permit Determination of Applicability application, 4,380,000 gallons of egg processing water (process wastewater per R18-9-901A.29). This water containing urine, feces, feed, etc. is placed in evaporation impoundments where regulated gases and odor are released.
- This facility could be a major pollution emitting facility. However, it is not known until air emissions are estimated, calculated, or measured.

 Baseline ambient air monitoring should have been performed prior to construction and operation. Here's a quote from Claudia Copeland's Air Quality Issues and Animal Agriculture: EPA's Air Compliance Agreement CRS report (p. 11):

"As contemplated in the agreement, the monitoring was carried

out from mid-2007 through the end of 2009. Purdue University researchers then conducted final processing and reviews of the data and prepared reports on the individual sites. In January 2011, EPA released the data and reports on the monitored AFOs. The agency has not yet issued a final summary report to interpret all of the data, but an analysis was prepared by the Environmental Integrity Project (EIP), a nonprofit organization that focuses on environmental enforcement issues. EIP's analysis found that, despite the small number of monitored sites, measured levels of several pollutants—particles, ammonia, and hydrogen sulfide—exceeded CAA health-based standards, worker protection standards, and federal emission reporting limits at some of the study sites. EIP was critical of aspects of the study design (e.g., failure to measure short-term emissions at all sites, and inclusion of "negative" values that could represent erroneous samples and thus may underestimate pollution) and recommended that the data be thoroughly peer reviewed."

Since the much smaller hen houses at the AFOs in the study exceeded CAA health based standards for particulates, ammonia, and hydrogen sulfide, there is little doubt that the exceptionally large hen houses at this extremely large CAFO will also exceed particulates, ammonia, and hydrogen sulfide CAA health-based standards. The EIP report can be found by a web search of the title: Hazardous Pollution from Factory Farms: An Analysis of EPA's National Air Emissions Monitoring Study Data or by drilling into EIP's web site:

www.environmental integrity.org/documents/Hazardous Pollutants from Factory Farms.pdf.

 Federal, state and county regulations do not prohibit a New Source Review for Concentrated Animal Feed Operation facilities.

MCAQD response was:

"Response: The standards for New Source Review are est ablished in Rule 240. The fugitive emissions from the operation do not trigger the major source thresholds included in the rule. Numerous testing events have confirmed that the hydrogen sulfide concentration does not exceed the standard. New Source Review is not triggered with the current equipment and poultry operations."

MCAQD provided a regulatory reference, but not regulatory rationale not to issue a permit. MCAQD makes a statement that a "New Source Review is not triggered" but provides no information required by ADEQ Guidance on how to Comply with Arizona State Hazardous Air Pollution Program (§ 2 Developing Emission Estimates). Instead MCAQD takes credit for occasional monitoring at the facility's property line during non-odor events.

To clarify MCAQD actions and demonstrate to the community the presence of air pollutants, I am submitting the following comments:

- a. How does MCAQD know that fugitive emissions from the operation do not trigger the major source thresholds? Please disclose the data to demonstrate this conclusion and amend the Non-Title V Technical Support Document with the data.
- b. What in the regulation determines that permitting is not required by conducting hydrogen sulfide field measurements at the property line?
- c. MCAQD stated: "Numerous testing events have confirmed that the hydrogen sulfide concentration does not exceed the standard". Don't most permitted facilities not exceed their permit standards? Why is this criteria for not issuing a permit?
- d. What other regulated pollutants does the source emit? What points of air emissions were measured (i.e., hen houses, egg wash process wastewater surface impoundment ponds, and manure piles)? Why are they not considered in the permitting process?

Comment #9: Volatile Organic Compound Releases

MCAQD responded to a comment for a large CAFO air quality permit modification bout VOCs where the following estimates were provided:

"Annual VOCs at Tonopah facility: (Currently - 4.3 million birds) - (59.6 mg/day/hen) $0.0000596 \text{ kg/day/hen} \times 4.3 \text{ million birds} = 256.28 \text{ kg/day} 1 \times 365 \text{ days} = 93,542 \text{kg/year} \times 2.20462 \text{ lbs} = 206,225 \text{ lb/yr} = 103 \text{tpy} \text{ (tons per year)}$ "

The comment was to demonstrate that hen houses and manure piles operation should require a Non-Title V or Title V air quality permit. In MCAQD's response, it cited the Animal Feeding Operations Consent Agreement and Final Order; Notice at:

http://www3.epa.gov/airquality/agmonitoring/pdfs/afolagooneemreport2012draftappe.pdf#_ga=1.22794168.2087244103.1424728829

In its response, MCAQD emphasized "The Agency plans to issue regulations and/ or guidance on this issue after the conclusion of the monitoring study.", where the "Agency" is the EPA. What MCAQD did not acknowledge in the document is the EPA's are the following statements:

"To the extent that certain pollutants from AFOs are regulated under the CAA and are emitted in quantities that exceed regulatory thresholds, EPA can and will require AFOs to comply with all applicable CAA requirements, including limiting those emissions where appropriate."

"Relevant Air Pollutants and Applicable Laws: AFOs emit several pollutants, including ammonia (NH $_3$), hydrogen sulfide (H $_2$ S), particulate matter (PM), and volatile organic compounds, (VOC). NH $_3$ and H $_2$ S are hazardous substances under

CERCLA and EPCRA, and the release of these gases need to be reported under CERCLA and EPCRA if released in sufficient quantities. H₂S, PM, and VOC are all regulated under the CAA and subject to various requirements under that statute and the implementing Federal and State rules and regulations."

"Participation in the Air Compliance Agreement is voluntary. The Agreement is not intended to affect in any way EPA's ability to respond to an imminent and substantial endangerment to public health, welfare or the environment. Participation in the Agreement will not provide protection for criminal violations of environmental laws. In addition, the Agreement is not intended to affect the ability of States or citizens to enforce compliance with nonfederally enforceable State laws applicable to AFOs. "

"EPA recognizes that State and local agencies are undertaking efforts to improve emissions estimation methodologies for AFOs. EPA supports continued action to improve emissions informati on for all source categories and will use the best information available as we implement our programs. EPA also supports Stat e and local efforts to demonstrate improved emissions reduction strategies and recognizes the value of State or local control requirements tailored to the needs of specific geographic areas. For these reasons, nothing in the Air Compliance Agreement will be used to delay or otherwise interfere with the implementation and enforcement of existing State statutes that eliminate exemptions to CAA requirements for agricultural sources of air pollution. "

"Notwithstanding any other provision, this Agreement shall not delay or interfere with the implementation or enforcement of State statutes that eliminate exemptions to Clean Air Act requirements for agricultural sources of air pollution."

"Nothing in this paragraph is intended to limit a state or local government's authority to impose applicable permitting requirements."

EPA actually encouraged the implementation and enforcement of current laws, including those for objectionable odors. The EPA may issue regulations and/or guidance after the emission factors are determined, but they are not stopping States and local agencies from acting.

Contrary to MCAQD statement that there is an "absence of regulator framework", there is framework in place through federal, state, and Maricopa County laws, regulations, and rules to require Non-Title V or Title V permitting of hen houses and manure operations. Maricopa County Air Quality Department should enforce requirements in the following rules and issue an air quality operating permit for hen houses and manure operations:

- Rule 100-General Provisions and Definitions
- Rule 200-Permit Conditions
- Rule 210-Title V Permit Provisions
- Rule 220-Non-Title V Permit Provisions
- Rule 240-Federal Major New Source Review
- Rule 241 Permits for New Sources and Modifications to Existing Sources

MCAQD also stated: "MCAQD considers VOC emissions from hen houses to be fugitive. Rule 100 § 200.60.c was cited: "The fugitive emissions of a stationary source shall not be considered in determining whether it is a major stationary source." No logic or rationale was provided as to why MCAQD believed that the emissions were fugitive. The VOC emissions are generated inside of a hen house building, which makes it a source according to Rule 100 §200.100: "Any building, structure, facility, or installation that may cause or contribute to air pollution." and a stationary source according to Rule 100 §200.105: "Any source that operates at a fixed location and that emits or generates regulated air pollutants." MCAQD is somehow using the definition of fugitive emissions to describe the untreated, forced discharge of air from a hen house building. Rule 200.54 has the following definition: **FUGITIVE EMISSION:** Any emission which could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening.

I have the following comments:

- MCAQD has all the necessary regulatory framework needed to issue an air quality permit and should do so as other states have done.
- What is MCAQD's logic and rationale to define emissions from a building to be fugitive?

Comment #9: Locally Enforceable Only

Regarding SPECIFIC CONDITIONS, <u>Natural Fuel Burning Equipment (page 5 of 7)</u>, what does "Locally Enforceable Only" mean? How is this done?

Comment #10: Odor Control

Air Quality Permit 140062 Rev. 0.0.1.0 DRAFT has the following permit condition:

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[N \square \square W \square \S W \square]
\mathbb{N}_{12}
[NIIIWI §WI]"
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The EPA recognized the problems with odor and encouraged state and local action in the Animal Feeding Operations Consent Agreement and Final Order (Federal Register Volume 70 No. 19, page 4959:

"EPA recognizes that AFOs can have a negative impact on nearby residents, particularly with respect to objectionable odors and other nuisance problems that can affect their quality of life. EPA also recognizes that concerns have been raised recently regarding the possible health impacts from AFO emissions."

And goes on to say:

"EPA supports local and State efforts in those areas and relies on them to enforce their State and local laws for odor and nuisance problems, health code violations, and zoning challenges pos ed by AFOs."

The Arizona Administrative Code also has supporting regulations at R18-2-730 Standards of Performance for Unclassified Sources.

Between ADEQ and MCAQD there has been over 180 complaints filed against this facility in 2015, with the vast majority being odor complaints. The facility continues to expand, so complaints will not be decreasing.

My comments are:

- a. Why doesn't MCAQD enforce the permit's Odor Control Standard?
- b. Want will it take for MCAQD to enforce the permit's Odor Control Standard?
- c. What action does MCAQD take with other facilities with this number of complaints?

Comment #11: Section Z-M missing information

The application is incomplete. Section Z-M is blank and does not have emissions information as required. The permit application in SECTION Z-M states: "If supporting calculations are not included with the application, the application will be deemed incomplete." It is also a violation of MCAQD Rule 200 § 401. By Maricopa County Air Quality Department's own requirements, this application must be deemed incomplete.

Comment #12: Diesel-generator sets

The proposed equipment list indicates all of the diesel-generator sets are existing, but the last page of the application indicates that G52 and G53 won't be installed until October, 2016. Shouldn't G52 and G53 be indentified on the equipment list as future?

Comment #13: September 2014 boiler installation

The minor permit modification application (#140062-410195) indicates that a Lochnivar Copper fin II Boiler Model CHL0992 of 990,000 Btu/hr was installed in September of 2014. It was not included in the original application (#140062-404741).

Comments:

- a. Have the boilers been in operation since September 2014?
- b. If so, has a notice of violation been issued? If not, why not?

Comment #14: Source of fuel for boilers

The minor permit modification application (#140062-410195) indicates that a Lochnivar Copper fin II Boiler Model CHL0992 of 990,000 Btu/hr was installed in September of 2014. The technical information about the boiler is not totally legible, but seems to be indication on page 5 of 13 of the application that natural gas is the source of fuel. Non-Title V Technical Support Document #140062-410195 also indicates that natural gas is the source of fuel. There are no natural gas lines in the area, but there are natural gas pipelines several miles away. It is unlikely that the two boilers installed and most likely operating since September 2014 are fueled by natural gas.

Comment:

- a. Is natural gas the source of fuel or has the permittee filed a false application and the source of fuel is actually propane?
- b. If the source of fuel for the boiler is propane, is there a propane storage tank on the facility?
- c. If there is a propane tank on the facility, it did not appear on the original application or the minor permit modification. If there is a propane storage tank at the facility, has or will a notice of violation been or be issued? If not, why not?

Comment #15: Construction 10,000-gallon diesel fuel storage tank

The minor permit modification application (#140062-410195) has a statement in section 1. NARRATIVE DESCRIPTION OF THE PROPOSED MODIFICATION (document page 3 of 13): "... One Fuels tank for construction (10,000 gallons red diesel AST). ..." The 10,000 gallon diesel storage tank does not appear on the list of equipment to be installed, so perhaps it is already installed. Also, it is not mentioned on the Technical Support Document. Note that this fuel is being used for "construction", not farm operations.

My comment is that the Technical Support Document should acknowledge and discuss the 10,000-gallon diesel fuel storage tank.

Comment #16: Compliance inspection

MCAQD was aware of the original construction of the Hickman's Egg Ranch at 41625 W. Indian School Road without an air quality permit. Commencing construction without a permit is a violation of A.R.S. 49-426.A.2, A.R.S. 49-480.C, and MCAQD Rule 100 § 301. MCAQD was aware of the construction because Dust Control Permit #E104170 was issued on January 30, 2014, Dust Control Violation 732958 was noted on March 14, 2014, Dust Control Violation NOV 732962 was noted on May 8, 2014, Dust Control NOV 732897 was noted on September 30, 2014, and numerous complaints and concerns from the community, some that were provided to the permitting section. MCAQD also knew that an air quality permit was needed for operation because of the owner's Arlington Egg Ranch facility operating under Air Quality Permit to Operate and/or Construct No 040136. Despite warnings from the community that the facility was operating without an air quality permit. MCAQD did not conduct an inspection until three days after MCAQD issued the permit. The inspection did result NOV 732995 because the facility was in operation without an air quality permit.

It appears that the permittee is taking same non-compliance approach with this minor permit modification. The minor permit modification application (140062-41019) indicates that the "Lochinvar Copper fin II Boiler Model CHL0992" was installed in September 2014. Since they were installed in September 2014, they should have been included in the original permit application and listed on the permit. There may also be a propane tank associated with the boilers.

The permittee has a history of not acquiring permits for facility construction/operation and equipment installation/operation as regulations require. My comment is that MCAQD should conduct a comprehensive inspection of the facility to ensure that all air emission sources are identified in the permit and take corrective actions if they are not. The minor permit modification should not be issued until the inspection is conducted and non-compliance concerns resolved.

Comment #17: Non-Title V Permit for Hen Houses

How did MAQD determine that Rule 200 Permit Requirements §303.2.a. or §303.2 b. did not apply to the facilities hen houses? The hen houses and associated manure collection and storage emit hazardous air pollutants through forced ventilation. Did MCAQD use ADEQ Guidance on How to Comply with the Arizona State Hazardous Air Pollutant Program § 2 Developing Emissions Estimates to make a determination of emissions? If not, why not?

Rule 200 Permit requirements Section 300 established requirements for sources that emit or have the potential to emit regulated air pollutants. The hen houses

through forced ventilation emit regulated air pollutants (particulate matter, VOCs, hydrogen sulfide, and ammonia). The public and environment must be protected from these pollutants. The facility is not operating under an Agricultural General Permit (Best Management Practices) because it is not located in the "regulated area" (A.R.S. 49-457.P.6) Why is MCAQD not including hen houses as a source of pollution in this permit modification? What is the regulatory rationale? The permit should not be issued without including hen houses as a source of air pollution.

Comment #18: Odor Complaint Response Process

The response to odor complaints must be specified in the permit Currently the MCAQD seldom investigates odor complaints, which are a violation of Specific Conditions, Odor Control, Standards of Air Quality Permit to Operate and/or Construct #140062. MCAQD will take the odor complaint, contact the citizen if requested, send an email to the ADEQ Agricultural BMPs program manager, notify the permittee, and "change the status to close out." For 2015 there have been over 120 complaints to MCAQD and over 60 to ADEQ.

The facility is not operating under an Agricultural General Permit (Best Management Practices) because it is not located in the "regulated area" (A.R.S. 49-457.P.6), so there is no reason to involve the ADEQ Agricultural BMPs program manager. Odor complaints are increasing as the facility continues to expand.

The permit should be modified specify actions to investigate, comply, and enforce the Odor Control Standards in the permit.